

**TO: Suborbital Science Program
NASA Headquarters
Mail Suite 3F71
Attn: Randy Albertson**

**FAX: (202) 358-2770
Voice: (202) 358-7212**

Flight Report

Aircraft :	Kenn Borek Air DC-3T Basler
Operating Site(s) From / To :	Casey Skiway/Casey Skiway
Flight Date :	December 19, 2009 (AEDT)
Flight Number / Data Flight # :	F25 / 23
Time out:	0615 UTC
Time in:	1328 UTC
Flight Time :	7.2 hrs
Flt Request # / PI:	NASA 20090602-084128 (Blankenship)
Purpose of Flight :	Data <input checked="" type="checkbox"/> Ferry <input type="checkbox"/> Functional Check <input type="checkbox"/> Other <input type="checkbox"/>
Sensor Payload :	University of Texas at Austin HiCARS ice penetrating radar; UT Reigl LD-90 laser distance meter; UT Geometrics 823-A magnetometer; USAF Sigma Space photon counting lidar, NGA BGM-3 gravity meter
Comments :	<p>The aircraft flew on its fifth survey flight from Casey's skiway. The primary target were reflights of icesat tracks 286 and 33 for surface elevation along the main trunk of Denman Glacier, and over the Shackleton Ice Shelf, as well as bathymetry and coastal ice thickness between Vanderford and Denmen Glaciers. Mill Island, a target of AAD drilling this season, was also surveyed. Extensive coastal cloud layers and turbulence hampered the coastal portions of the flight. Valid laser data was recovered from 76% of the icesat reflights, mostly over the grounded ice.</p> <p>All systems performed excellently – 2051 line kilometers of data were collected. The flight time was moved earlier to deal with persistent fog at the skiway at local midnight – this may have some impact of the quality of the magnetic data for the first half of the flight.</p>

SUBMITTED BY: Duncan Young 22 December 2009